The PROVED

HEATILATOR

T.M. Reg. U.S. Pat. Off.

Fireplace

CIRCULATES HEAT TO ALL PARTS OF THE ROOM

AMERICA'S LEADING FIREPLACE

New

The HEATILATOR* FIREPLACE

When you build a fireplace in your home or camp you expect it to be a real source of comfort and enjoyment. But if it smokes it cannot be used — if it fails to warm the room comfortably it becomes a mere ornament. There is only one way to avoid this risk. Build your fireplace around the proved Heatilator unit and know in advance that it will be a real source of comfort and enjoyment.

NOW—A SCIENTIFIC FIREPLACE!

The heat-wasting, smoky, old fashioned fireplace is gone forever. In its place has come the Heatilator Fireplace—designed by engineers to provide a new comfort and efficiency undreamed of in the past. Architects and builders recognize it as the first real improvement in fireplace construction. Owners from coast to coast have found it a fireplace that they can really use and enjoy.

The secret of this popularity is easy to understand—because the Heatilator Fireplace actually circulates heat to every corner of the room—without a trace of smoke. No longer does your back freeze while your face parches. No more will annoying smoke spoil your enjoyment of the cheery fire or damage furniture and decorations. Yet with all these advantages, the Heatilator Fireplace preserves every bit of the familiar charm, all of the homey coziness and intimate friendliness that has made the fireplace a familiar symbol of home and hospitality.

CIRCULATES HEAT TO EVERY CORNER

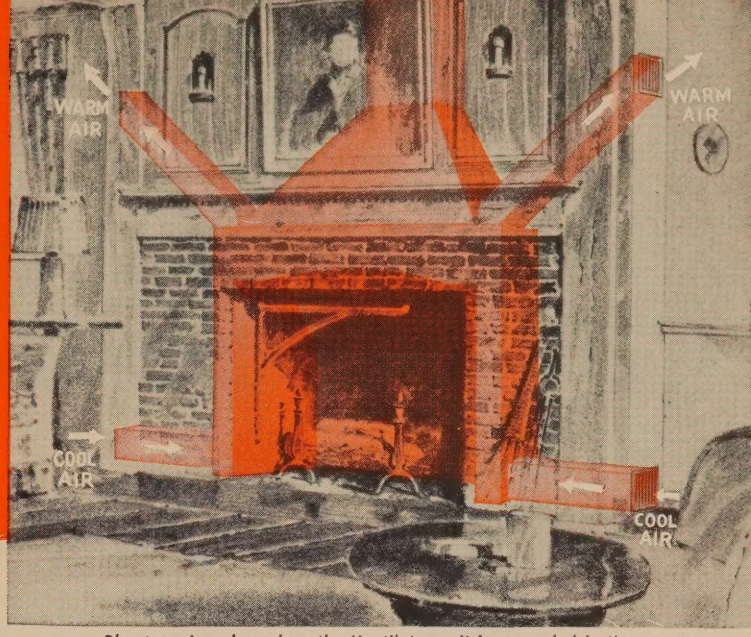
By using the principle of the warm air furnace, the Heatilator adds a new circulated heat to the directly reflected heat of the ordinary fireplace. This extra warmth was formerly wasted up the chimney and in unnecessary heating of the masonry. Now it extends the zone of comfort to every corner of the room.

Operating on the same principle as a warm air furnace, the double-walled Heatilator firebox forms a heating chamber at the sides and back of the fire. Cool air from floor level enters this chamber where it is quickly heated by contact with the hot firebox walls. It then rises naturally, returning to the room through grilled openings above the fireplace or in adjoining walls. Thus every part of the room is heated uniformly and comfortably. Where desired this heat can be conducted to adjacent or upper rooms as well.

*Heatilator is the registered trade mark of Heatilator Inc.

Copyright 1947, Heatilator Inc.

Comfort FOR YOUR HOME OR CAMP



Phantom view shows how the Heatilator unit is concealed in the masonry

CUTS COOL-WEATHER HEATING COSTS

Count the weeks in spring and fall when some heat is needed—but when it is most difficult and expensive to operate the central heating plant. This is the time when your Heatilator Fireplace actually saves you money. A little fire in the morning and again in the evening—with heat circulating throughout the house—brings new comfort and health protection.

While a Heatilator Fireplace is not recommended as a substitute for a central heating plant in northern climates, it provides a welcome supplement to the furnace during severe winter weather. In milder climates it is often the only source of heat required for year 'round comfort, thus saving the expense of a central heating system that would seldom be used. In summer camps and cabins there is no better method than the Heatilator Fireplace for solving the cool weather heating problem during the camping season.

ASSURES CORRECT OPERATION

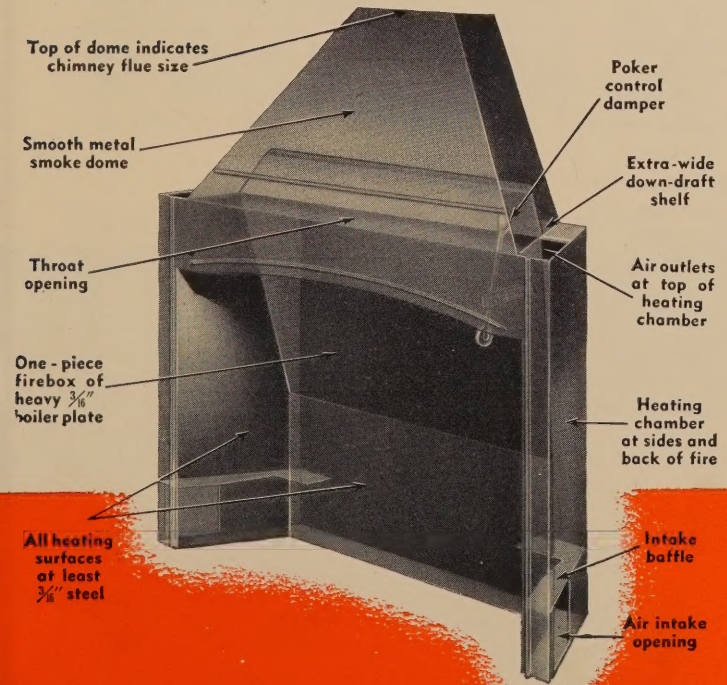
The success of a fireplace has long depended upon the skill of the builder—plus a certain amount of luck. That is why over half of the fireplaces in existence smoke so badly that they can never be used. The Heatilator eliminates this risk by providing a scientifically designed form that does away with guesswork and the causes of failure that are always present in ordinary rule-of-thumb construction methods.

The Heatilator unit is actually a complete fireplace in itself, requiring only the decorative masonry to complete the installation. The firebox, throat and flue openings are properly proportioned for correct operation. The damper, downdraft shelf and smoke dome are all built-in parts of the unit and correctly located.

SAVES MATERIALS AND LABOR

Most owners would gladly pay much more for the extra comfort and trouble-free operation that the Heatilator provides. But you'll be surprised to know that the Heatilator actually adds very little to the cost of the completed fireplace because the unit comes complete from hearth to flue. No firebrick is needed for the back or sides of the firebox. The cost of a separate damper or smoke dome is eliminated—and there's a saving in masonry and other materials as well.

Equally important is the saving in the mason's time. The designing is done, the damper is in place, the firebox, downdraft and smoke dome are formed in the unit itself. Deduct these savings from the cost of the Heatilator and you will realize how little extra it costs to own one of these modern fireplaces. If fuel economy in cool weather is figured, your Heatilator Fireplace will actually save you money in a short time.


Top of dome indicates chimney flue size
Smooth metal smoke dome
Throat opening
One-piece firebox of heavy 3/16" boiler plate
All heating surfaces at least 3/16" steel
Poker control damper
Extra-wide down-draft shelf
Air outlets at top of heating chamber
Heating chamber at sides and back of fire
Intake baffle
Air intake opening

The Heatilator Fireplace is complete from hearth to chimney flue—including scientifically designed firebox, throat, downdraft shelf, damper and smoke dome—all pre-assembled in one compact unit.

PROVED ALL OVER AMERICA IN HOMES

Brick and oak mantel with outlets in wall niches

The HEATILATOR Fireplace . . .

is not an experiment, not an untried idea. It has been proved for many years under all conditions. Thousands of satisfied owners from coast to coast have found that the Heatilator lives up to every claim made for it. In their homes, camps and basement recreation rooms, it has operated with efficiency at all temperatures and altitudes. As a result, this method of building a fireplace has won the enthusiastic approval of owners everywhere. Leading architects and builders recognize the Heatilator as the one sure way to guarantee the success of their fireplaces. That is why the Heatilator has become standard equipment for every modern home.

FOR NORTHERN HOMES

The Heatilator Fireplace provides new healthful comfort during cool spring and fall weather—saving furnace fuel on many days when it is only necessary to take the chill off the house. Now you can build a fireplace and know in advance that it will operate correctly—that it will deliver much more heat than an ordinary fireplace, and without a trace of smoke.

FOR SOUTHERN HOMES

The Heatilator Fireplace is often the only heating equipment required, saving the expense of installing a central heating plant which will be used but a short time each year. A cheery fire morning and evening circulates abundant warmth to all parts of the room and adjoining rooms. It is a proved source of comfort for those damp chilly days in the winter season, with complete freedom from smoking, cold drafts and all the other disadvantages of an ordinary fireplace.

FOR SUMMER CAMPS

In summer camps and cabins, the open fireplace is usually the only source of heat and must provide living comfort on cool days and nights. The inefficiency of the ordinary fireplace limits camp life to two or three summer months. The Heatilator Fireplace extends this time by many weeks.

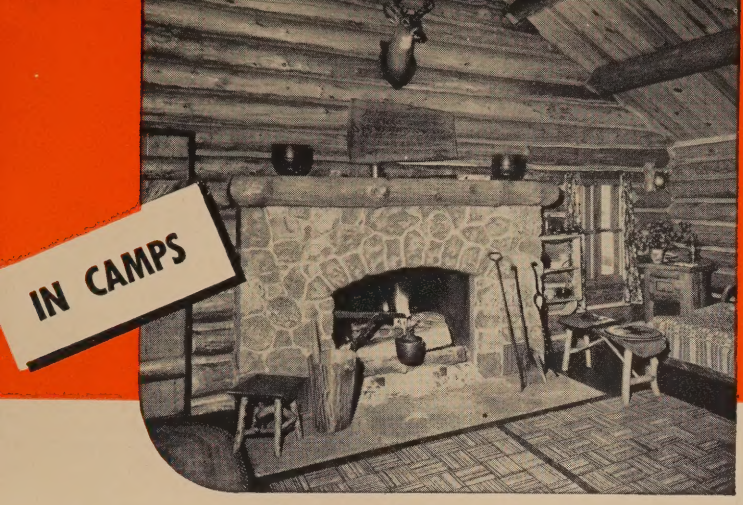
No wonder owners say the Heatilator is a wise investment in comfort and enjoyment. They can open their camps earlier in spring—keep them open later in fall—and even use them for winter week-ends.

FOR BASEMENT ROOMS

The adequate heating of basement rooms is always a problem. It is difficult to force air from a warm air furnace down to basement level. Where hot water or steam heat is used, unsightly pipes and radiators mar the appearance of the room.

The Heatilator ends heating troubles in basement game rooms by providing a new source of quick, circulating heat. You enjoy complete use of the room because furnishings do not have to be placed close to the fireside for warmth.

Circulated heat warms this pine paneled study



A native stone fireplace in a log cabin

New comfort for the basement room

BUILD *Any Style* FIREPLACE AROUND THE HEATILATOR

The Heatilator is a built-in structural part of the fireplace—not an addition to it. Practically hidden in the masonry it puts no limit on the architectural style of the mantel or the type of masonry that is used.

Only the air intake and outlet grilles indicate that your fireplace is built this modern way—and they are easily placed to blend harmoniously into the general design. Where the mantel projects sufficiently these grilles can be located out of sight in the ends of the chimney. If the mantel is flush with the wall, the intakes can be located in the baseboards on either side of the fireplace—with the outlets high above the mantel itself. In fact, the position of the grilles can be adapted to meet practically any requirement.

Heatilators are available in a wide range of sizes with openings from 24" to 60" in width.

REMODEL YOUR OLD FIREPLACE

If your present chimney has a good draft but the fireplace cannot be used because of improper design or burned out firebrick, consult your dealer or mason about rebuilding it around the Heatilator. This is quite practical in most cases—and the extra comfort and satisfaction of a really useful fireplace will be well worth the moderate cost.

CORRECT OPERATION ASSURED

The Heatilator establishes the correct design and proportions of the fireplace, thereby eliminating the common causes of faulty operation. When installed according to directions in a properly built chimney with normal draft, the Heatilator assures complete freedom from smoke. The manufacturer will refund the full purchase price plus up to $20 to cover removal and reshipment of any unit that smokes if, after inspection by a factory representative, the cause cannot be located and corrections recommended.

ASK YOUR BUILDING MATERIAL DEALER

Before you build a new fireplace or remodel an old one be sure to ask your building supply or lumber dealer to show you the Heatilator. Units are carried in stock by leading dealers everywhere—or can be shipped promptly from factory to the dealer who is furnishing your other materials.

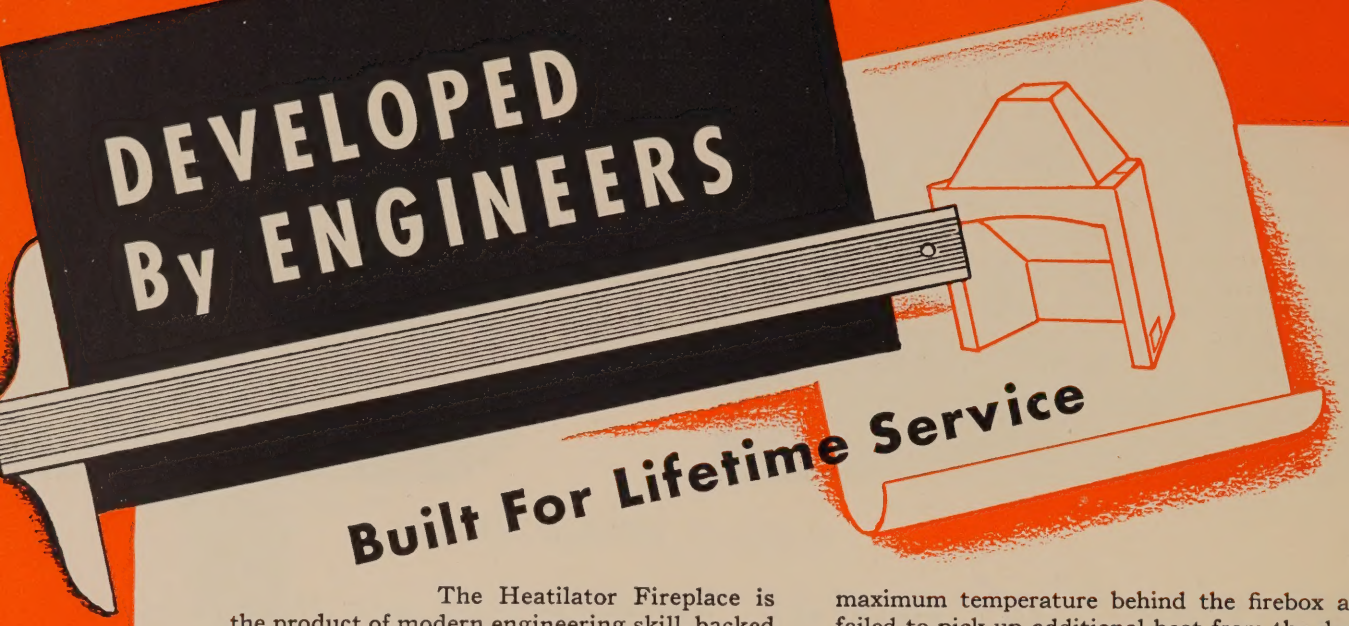
Look for the Heatilator name on the unit—it is your guarantee of lasting satisfaction.

Heatilator Inc. **Syracuse 5, N. Y.**

The charm of Colonial design plus modern utility

Mission style fireplace in a southern home

DEVELOPED By ENGINEERS



Built For Lifetime Service

The Heatilator Fireplace is the product of modern engineering skill, backed by years of research and countless thousands of satisfactory installations. Its scientific design has been proven correct under all conditions — its heavy construction insures lifetime trouble-free service.

▶ BUILT OF BOILER PLATE STEEL

All parts of the Heatilator in contact with the fire are made of heavy 3/16" boiler plate steel. This is the same material used successfully in the finest steel furnaces. Experience has clearly proved that use of less than this heavy plate will definitely reduce the life of the unit and create the hazard of expensive repairs.

▶ FIREBOX FORMED IN ONE PIECE

Equally important is the construction of the Heatilator firebox. Formed of a single piece of 3/16" boiler plate, there are no welded joints across the back or in the lower corners that might crack under intense heat. It provides a durability not obtainable from a firebox constructed out of several pieces of steel.

While lighter steel is used for the outer shell, this serves only as a form for the masonry and the extra cost and weight of heavier material would not be necessary or desirable.

▶ FOLLOWS MODERN PRACTICE

Early models were designed to take cold air from outdoors. Now the air comes direct from the room or rooms to be heated in accordance with the best heating practice. This improvement simplified construction and insured heat regardless of unfavorable winds or drafts that might actually discharge the heat outdoors by reversing the flow of air through the fireplace.

▶ NO HEAT TAKEN FROM DOME

It was once thought that extra heat might be gained by passing the air over the dome of the unit. Actual tests showed that the air reached maximum temperature behind the firebox and failed to pick up additional heat from the dome surface. Furthermore air could be passed over the dome with safety only if the dome were constructed of the same heavy material as the firebox.

▶ NO TUBES TO OBSTRUCT DRAFT

Originally the heat was brought from the heating chamber through tubes across the throat of the Heatilator. However, it was soon evident that these tubes would have a limited life and be practically impossible to repair. Also they interfered with the chimney draft by obstructing the throat and prevented easy access to the downdraft shelf for cleaning. As a result, these tubes were eliminated and the heat is now taken directly from the heating chamber itself.

▶ COMPLICATED BAFFLES ELIMINATED

Another attempt to increase heating efficiency was made by installing baffles or fins in the heating chamber. These were supposed to guide the circulating air and add to the effective heating surface. However these fins only hindered the flow of air and complicated construction—without any increase in efficiency that would warrant a "premium" price for the unit.

▶ IMPROVED POKER-CONTROL DAMPER

An important feature of the Heatilator is its correctly designed and closely fitted damper. It is easy to operate, can be adjusted to any desired position and eliminates the need for fixtures in the mantel. Although it is firmly built into the unit, it can easily be removed to clean the downdraft shelf when necessary.

▶ INSULATING MATERIAL

A blanket of rock wool is supplied with each Heatilator to be placed between the unit and the masonry. This prevents heat from being absorbed into the masonry, simplifies construction, and serves as an expansion cushion. The Heatilator actually lessens the chance of cracked masonry.

AT
4258
H35
1947

AVERY LIBRARY
COLUMBIA UNIVERSITY

HEATILATOR FIREPLACE SPECIFICATIONS

HEATILATOR UNIT SIZES

Heatilator Fireplace units are available in seven sizes. Each unit is completely assembled—ready for installation. Insulating material is packed in the dome.

Heating capacity ratings are based on a forty degree rise which should be easily maintained in the ordinary type of construction. No account is taken of reflected or direct heat from the fire itself. These ratings should not alone determine the size unit to be used. Size of room, space available, window areas, etc. should also be considered. Where more than a forty degree rise in temperature is desired, a larger unit or use of fan grilles is recommended.

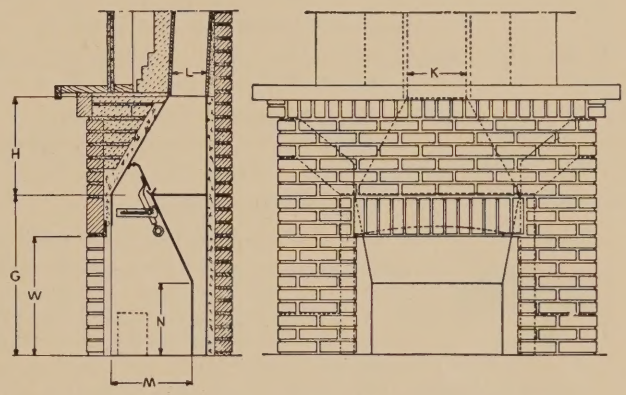
A No.133 unit rated for a 3500 cu.ft. room capacity would be recommended to increase the temperature from 32°to72° in a room 30 x 14 x 8 ft. or a total volume of 3360 cu. ft.

Heatilator Model No.	Finished Width	Opening Height	Fuel Capacity	Shipping Weight	Room Capacity (Natural Circulation)	Room Capacity (Forced Circulation)
124	24"	24½"	up to 17"	174 lbs.	2300 cu. ft.	3900 cu. ft.
130	30"	25½"	up to 23"	224 lbs.	3100 cu. ft.	5600 cu. ft.
133	33"	25¾"	up to 27"	247 lbs.	3500 cu. ft.	6700 cu. ft.
136	36"	27½"	up to 30"	279 lbs.	3900 cu. ft.	7800 cu. ft.
142	42"	31¼"	up to 32"	415 lbs.	4700 cu. ft.	9000 cu. ft.
148	48"	33 "	up to 38"	489 lbs.	5400 cu. ft.	9700 cu. ft.
160	60"	36 "	up to 50"	785 lbs.	6700 cu. ft.	11400 cu. ft.

Chimney Flue Sizes

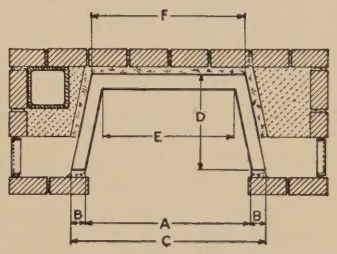
Heatilator Model Number	FOR CHIMNEYS OVER 20' HIGH			FOR CHIMNEYS UNDER 20' HIGH		
	Square or Rect. Flue	Round Flue	Oval Flue	Square or Rect. Flue	Round Flue	Oval Flue
124	8½"x13"	10"	8½"x13"	8½"x13"	10"	8½"x13"
130	8½"x13"	10"	8½"x13"	8½"x13"	10"	8½"x13"
133	8½"x13"	10"	8½"x13"	13"x13"	12"	13"x13"
136	13"x13"	12"	13"x13"	13"x13"	12"	13"x17"
142	13"x13"	12"	13"x13"	13"x18"	15"	13"x17"
148	13"x18"	15"	13"x17"	13"x18"	15"	17"x17"
160	13"x18"	15"	17"x17"	18"x18"	18"	17"x17"

Outside dimensions shown for square, rectangular and oval flues — inside diameters for round flues. Chimney height is measured from hearth.



Unit Dimensions in Inches

Model	A	B	C	D	E	F	G	H	K	L	M	N	W	W+
124	25	3¼	31½	18⅛	17¼	22⅛	31½	16	12	8	15	13½	24½	25½
130	31	3¼	37½	20⅛	23½	28½	33	17	12	8	17	14½	25½	26½
133	34½	3¼	41	20⅛	27	32	33½	20	12	8	17	15	25⅞	27⅛
136	37½	3⅝	44¾	20⅝	30	35⅞	35¼	20	12	12	17	16¾	27½	28⅞
142	44	5¼	54½	25⅛	32	39⅝	42	24	12	12	20	17	31⅜	33⅜
148	50	6⅜	62¾	26⅛	38	47	44	26	16	12	20	19	33	35½
160	62	8⅜	78¾	28¼	50½	64⅛	48	28	16	12	22	22	36	39½



The "W" column indicates height of *straight* opening. The "W+" column indicates height of *arched* opening. Arched openings are slightly lower at corners than dimension "W."

Read What These Heatilator Owners Say . . .

Lives Up to All Claims

"Our Heatilator fireplace cost us less to construct, has a fine appearance, is clean, economical to operate, does not smoke, and distributes the heat evenly over the entire building."— H. E. R., Bemidji, Minn.

A New Source of Pleasure

"I should like to shake hands with the man who designed the Heatilator. Its perfect operation has been a consistent source of pleasure in our home ever since it was installed. No smoke; no trouble; abundant heat. It never has failed to function." — G. B. F., Elyria, Ohio.

Ideal for Southern Home

"I installed a Heatilator Fireplace in my new home. The living room is 15' x 30' and two adjoining bedrooms are each 15' x 15'. I heat these three rooms from the one fireplace." — T. C. A., Decatur, Ala.

Adds Weeks of Use to Cabin

"I have a five-room cabin in Northern Wisconsin where I spend many weeks in the fall and during the winter months. The only heat is that furnished by the Heatilator unit, which has proved satisfactory in every respect." — C. P. S., Appleton, Wisconsin.

Heats Entire Bungalow

"Our Heatilator has already paid for itself in conservation of fuel. We have a five-room California bungalow and heat the entire house with just the living room fireplace." —W. M. L., San Diego, Calif.

A Severe Test

"My Heatilator gives more heat than I ever dared hope for. My cabin is in one of the coldest places in Colorado at an altitude of 9,000 feet. Still the fireplace heats a living room when outside temperature is far below zero." — Mrs. H. C. B., Denver, Colo.

Builder Recommends

"As a builder I have used sixteen Heatilators and found them very satisfactory and economical. There is satisfaction in knowing that a Heatilator will work correctly when finished." — G. W. E., Camp Hill, Pa.

Made Old Fireplace Usable

"Our Heatilator has been put in an old fireplace in a northeast corner room that was originally built for a sleeping porch. This room is now used for a second living room and we have no trouble in getting the temperature to 70 degrees at any time." — H. J. G., Ponchatoula, La.

HEATILATOR FIREPLACE ACCESSORIES

Intake and Outlet Grilles

No. 1 Grille

No. 2 Grille

No. 3 Grille

These attractive grilles are designed for use at the cool air intakes and warm air outlets of the Heatilator Fireplace. They effectively conceal the openings in the masonry, blend harmoniously with every style of mantel, and can be painted to match the surrounding walls or masonry. Each grille includes a metal housing which is set permanently into the masonry or wall and to which the grille face is attached. Grilles can be installed with the louvers in a vertical or horizontal position to suit the design and construction.

For Heatilator Units No. 124 to 142

No. 1.....Face 5⅝" x 12½".....Housing 4¾" x 11¾"
No. 2.....Face 8¾" x 8¾".....Housing 8" x 8"

For Heatilator Units No. 148 and 160

No. 3.....Face 8¾" x 10¾".....Housing 8" x 10"

Electric Fan Grilles

Where maximum circulated heat is desired, the flow of air through the Heatilator can be increased by means of electric fans attached to No. 2 or No. 3 intake grilles. These grilles are furnished complete with motor, fan, and an electrical connection mounted in the face. Where wiring is provided inside the masonry, a fan grille is available without the external connection. Motors are for 110 volt, 60 cycle A.C. current. Special motors on application.

No. 2F.....Face 8¾" x 8¾".....Housing 8" x 8"
No. 3F.....Face 8¾" x 10¾".....Housing 8" x 10"

Fan grilles are 5¾" in depth from face of grille to fan blade.

Shutter Grilles

Where extra outlets are installed in an adjacent or upper room to control the flow of heat from one room to another the No. 1 grille can be furnished with a shutter. In no case should shutter grilles be installed in a manner that could completely cut off circulation of air through the Heatilator.

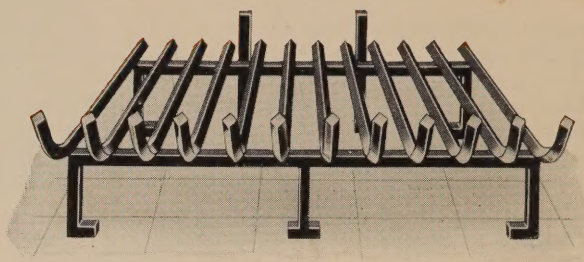
No. 1S.....Face 5⅝" x 12½".....Housing 4¾" x 11¾"

Masonry Supports

Straight angle supports—heavy steel angles to support the masonry over the fireplace opening.

Arch supports—for fireplaces with arched openings. Curved to conform to the Heatilator opening.

Fireplace Grate

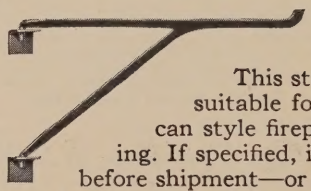


This efficient grate adds to the utility and appearance of any fireplace. It holds the fuel together for more even burning and provides a better draft by raising the fire off the hearth. Ashes drop through making emptying or cleaning unnecessary. This well-proportioned grate can hold a large supply of logs and does not limit their length. Its simple modern design harmonizes with any style of fireplace. The grate tapers in width toward the back, and is made of heavy ⅝" welded steel bars for lasting service.

No. 23—23" wide at front, 15¼" wide at back, 15" in depth, 9" high. Weighs 25 lbs. For use with Heatilator Units 124 and 130.

No. 29—29" wide at front, 21½" wide at back, 17" in depth, 9" high. Weighs 34 lbs. For use with Heatilator Units 130, 133 and 136.

No. 35—35" wide at front, 28" wide at back, 17" in depth, 9" high. Weighs 41 lbs. For use with Heatilator Units 136 and 142.



Fireplace Crane

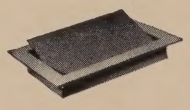
This sturdy, well designed crane is suitable for Colonial or Early American style fireplaces or for open fire cooking. If specified, it can be welded to the unit before shipment—or shipped separately for easy installation with self-threading screws. It is placed on the left side of the firebox to avoid interference with the damper control. Available for every size unit.

Cleanout Door

Heavy steel cleanout door for installation in basement cleanout pit. Door has latch handle. Anchor straps hold door firmly in masonry.

Frame 10"x 10".....Door 7½" x 7½".....Housing 7¼" x 7¼"

Ash Dump



Sets in hearth for easy disposal of ashes into basement cleanout pit. Heavy steel construction offers greater resistance to warping from excessive heat. Dump empties by tilting with poker.

Over-all size 7" x 10".....Dump 5" x 8".....Housing 5¼" x 8½"

HEATILATOR INC. **SYRACUSE 5, N. Y.**

140-1247 Printed in U.S.A.

DIRECTIONS FOR INSTALLING THE

HEATILATOR FIREPLACE

T.M. REG. U.S. PAT. OFF.

IMPORTANT—READ CAREFULLY

The Heatilator serves as a form around which to build the fireplace masonry—***but must not be used as a support for the masonry***. All masonry must be self-supporting.

A pad of insulating material must be placed between the Heatilator unit and the masonry at all points. This insulation, in convenient block form, is packed inside the Heatilator dome.

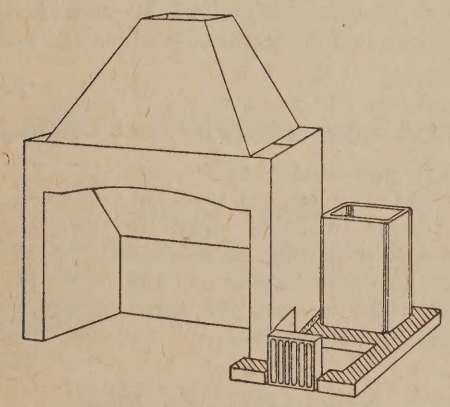
Lay up the insulation against the Heatilator as the masonry is being built. ***Care should be taken to prevent the masonry from contacting the metal at any point, especially at the corners.*** Detailed directions for handling and applying insulation are shown on package in which it is packed.

The Heatilator should be completely covered in this way leaving no cracks or open joints. ***Seal carefully around outlet openings with insulation to prevent loss of heat into the chimney.*** Failure to use insulating material as directed relieves the manufacturers of responsibility in case of a faulty or unsatisfactory installation.

Do not build a hot fire in a new fireplace until the masonry is well dried out. At least two to three weeks should be allowed to prevent checks and cracks from too rapid drying of the masonry.

Grilles equipped with electric fans for forcing circulation are designed for installation at cold air intake openings only.

Planning the Foundation



Lay out on the floor a full size plan of the fireplace to serve as a guide. Locate the intake openings, walls, partitions and heater flues—***being sure to allow at least ½″ space for insulation pad between masonry and all parts of the Heatilator.***

Size of Foundation

The full size floor layout will indicate the correct foundation size. Extra flues in the same chimney as well as the location and size of grilles used often govern the width of posts on each side of the fireplace. This in turn affects the overall length of the foundation.

Most chimneys have more than one flue. It is important to start these extra flues in the far corners of the chimney so they will not interfere with the Heatilator or air passages.

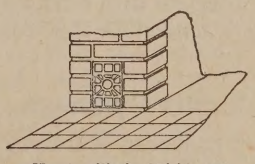
When fireplace foundation size must be determined before arrival of Heatilator, consult your dealer for width and depth of Heatilator unit selected. With these dimensions as a base, the intake openings, walls, partitions and extra flues can be located and the size of foundation determined. Ash pit, cleanout door, and hearth supports should also be planned with the foundation.

The masonry on either side of the fireplace opening should overlap the Heatilator by at least ½″ to cover the joint between metal and masonry.

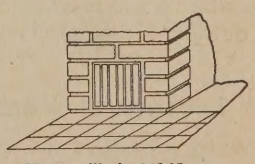
Foundation for Stone Fireplaces

When stone is used for the fireplace masonry and chimney, the course of stone at the back of the Heatilator and around the flue should be 8″ in order to withstand the load. This necessitates a slightly larger foundation than otherwise needed. It is best to provide air ducts of light metal insulated with asbestos and encased in the masonry to prevent the stone forming pockets or obstructions to the air circulation.

Grille Size and Location Affects Post Size



No. 1 grille in 12½″ post



No. 2 grille in 16½″ post

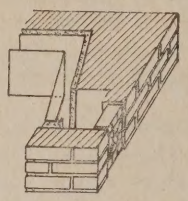
Where No. 1 grilles are placed in the front of a brick fireplace, the minimum post size will be 12½″; for No. 2 and No. 3 grilles, the minimum post size will be 16½″. When stone or other materials are used, post sizes will vary accordingly. If extra flue for heating plant is to be provided for, a minimum post width of 16½″ will be required.

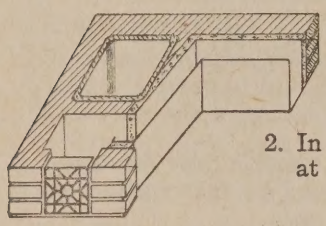
To locate No. 2 or No. 3 grilles in the ends of the fireplace, it is necessary to project the fireplace mantel 12½" to 13" into the room. To use No. 1 grilles in the ends requires 9½" projection into the room. Occasional installations are made with cold air grilles offset in the baseboard at the sides of the fireplace.

Location of Cold Air Intake Openings

Cold air intake openings may be located as follows:

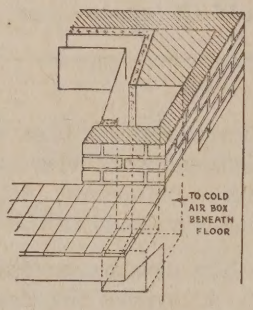
1. In the ends of mantel if projecting depth is sufficient.

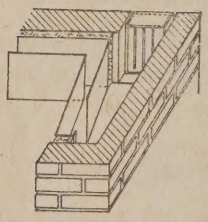




2. In the front of fireplace post at floor level.

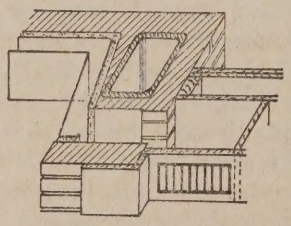
3. Through floor into passage from cold air boxes opening within the house or to outside walls.





4. In adjoining room, especially when warm air outlets are to be run into that room.

5. In baseboard at sides of fireplace.



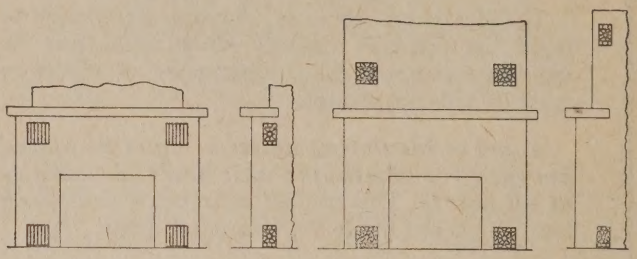
The most satisfactory plan is to take the cold air supply from inside the house in order to avoid drafts and unfavorable winds which might interfere with circulation. An outdoor air supply is not recommended for this reason.

Location of Warm Air Outlet Openings

Warm air outlet openings may be placed as follows:

1. In the front of the mantel either below or above the mantel shelf.
2. In the ends of the mantel, if there is room, either above or below shelf level.
3. Near the ceiling, in front or in ends.
4. In the mantel shelf, if mantel projects sufficiently to permit.
5. Through the rear of chimney to adjacent room if no interference from flues.

Where outlet grilles are placed some distance from outlets in the Heatilator, use asbestos covered metal pipes to conserve the heat and speed up circulation. In every case the warm air outlets in the masonry should be somewhat higher than the openings in the Heatilator itself.

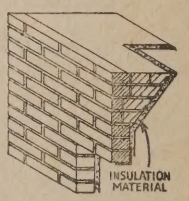


All Grilles below Mantel — Outlet Grilles above Mantel

Passages for warm air should be equal in area to Heatilator outlets. They should also be free of all pockets, obstructions or sharp turns and level runs that would reduce volume of circulation. Where any masonry is visible back of the intake or outlet grilles, it should be finished smooth and painted black before the grilles are permanently placed. ***Particular care must be taken to seal around the warm air outlets with insulating material*** to prevent loss of heat. Be sure there are no crevices left around dome through which the heat might escape.

Angle Support for Fireplace Opening

The angle iron used over the fireplace opening must set out from the Heatilator at least ½" and be cushioned with insulating material on top, back and ends. Also extend the insulation all the way up the apron and around the dome.



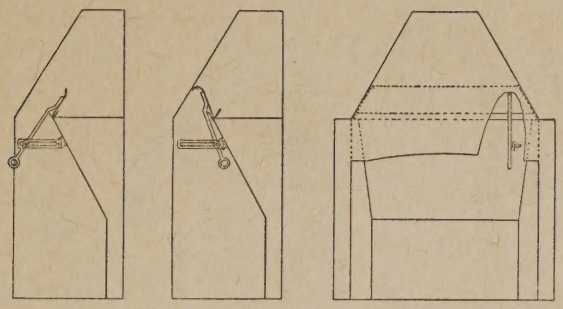
Size of Fireplace Flue

The opening at the top of the Heatilator dome indicates the size of chimney flue required and is in correct proportion to the size of fireplace opening. Any change in this flue size or any change in size of Heatilator opening may affect the draft and cause smoking. Make no change without first consulting the manufacturers.

A separate tight flue with no other connections into it must be provided for each fireplace. Angles or turns of over 30 degrees must be avoided. Where it is necessary to twist the flue opening (as from 8" x 12" to 12" x 8") great care must be taken to maintain full area of opening at every point.

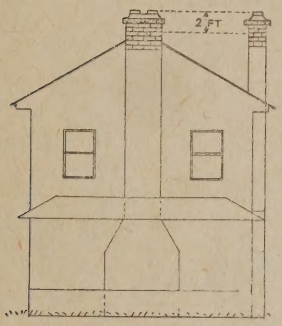
To Test Heatilator Damper

A simple poker control damper is built in as a part of the Heatilator. Be sure to remove the wire fastening at time of installation and adjust the damper for full opening. This is important in order to insure correct draft and satisfactory operation at all times.



The damper is held in any desired position by friction against the guide. When the handle is pulled forward until it hits the apron, the damper should be wide open with the valve about parallel with the dome front.

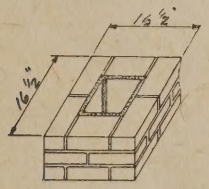
Height of Chimney



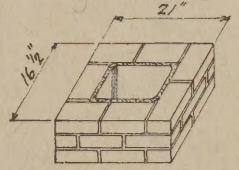
The chimney should extend at least two feet above the highest peak of the building. The top of the chimney should be sloped from the outside masonry to top of flue lining so that any cross currents will be directed upward. Surrounding buildings, hills or trees very often affect the draft and at times make it difficult to overcome the pressure set up by cross winds.

Size of Chimney

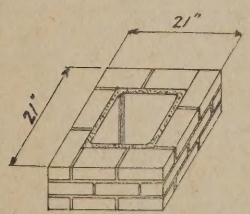
The sketches below indicate chimney dimensions and number of brick required for various flue sizes where chimney contains single flue only. When chimney contains more than one flue, dimensions are increased accordingly.



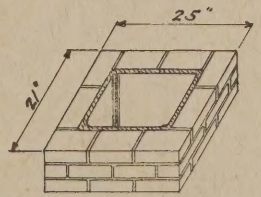
8½" x 8½" flue lining requires 26 brick per foot with ½" joints.



8½" x 13" flue lining requires 31 brick per foot with ½" joints.



13" x 13" flue lining requires 35 brick per foot with ½" joints.



13" x 17" flue lining requires 39 brick per foot with ½" joints.

NOTE: 10 bags of sand, 4 bags of cement and 1 bag of lime will lay 1000 brick.

To Rebuild an Unsatisfactory Fireplace Around the Heatilator

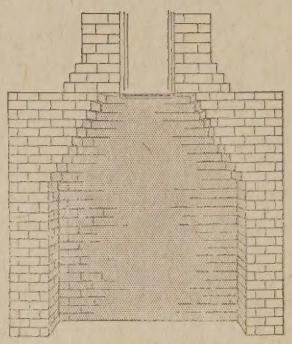
Before starting work check these two points carefully:

1. Size of present flue must be at least as large as required by Heatilator to be used.

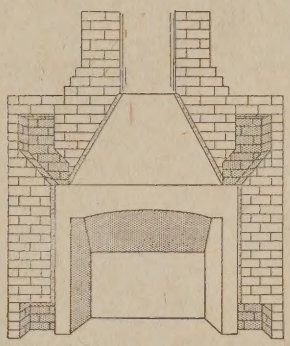
2. The chimney and mantel should be so constructed that an opening of sufficient size to admit the Heatilator can be made either from the front or back.

The next step is to open up the chimney—taking down the mantel and face of the fireplace if the unit is to be installed from the front.

Firebrick from the old firebox should then be taken out and the rough masonry cleaned up. Any obstructions should be removed and a coat of light cement placed on the masonry to fill the weak or uneven parts. ***Allowance of at least ½" must be made for insulation material around Heatilator.*** Air passages should then be provided, the unit set in place, and the fireplace masonry rebuilt according to directions for new construction



The chimney opened up to receive the Heatilator. Old firebrick has been removed and allowance made for insulation between masonry and unit.



The Heatilator in place with air intake and outlet passages being provided in the masonry.

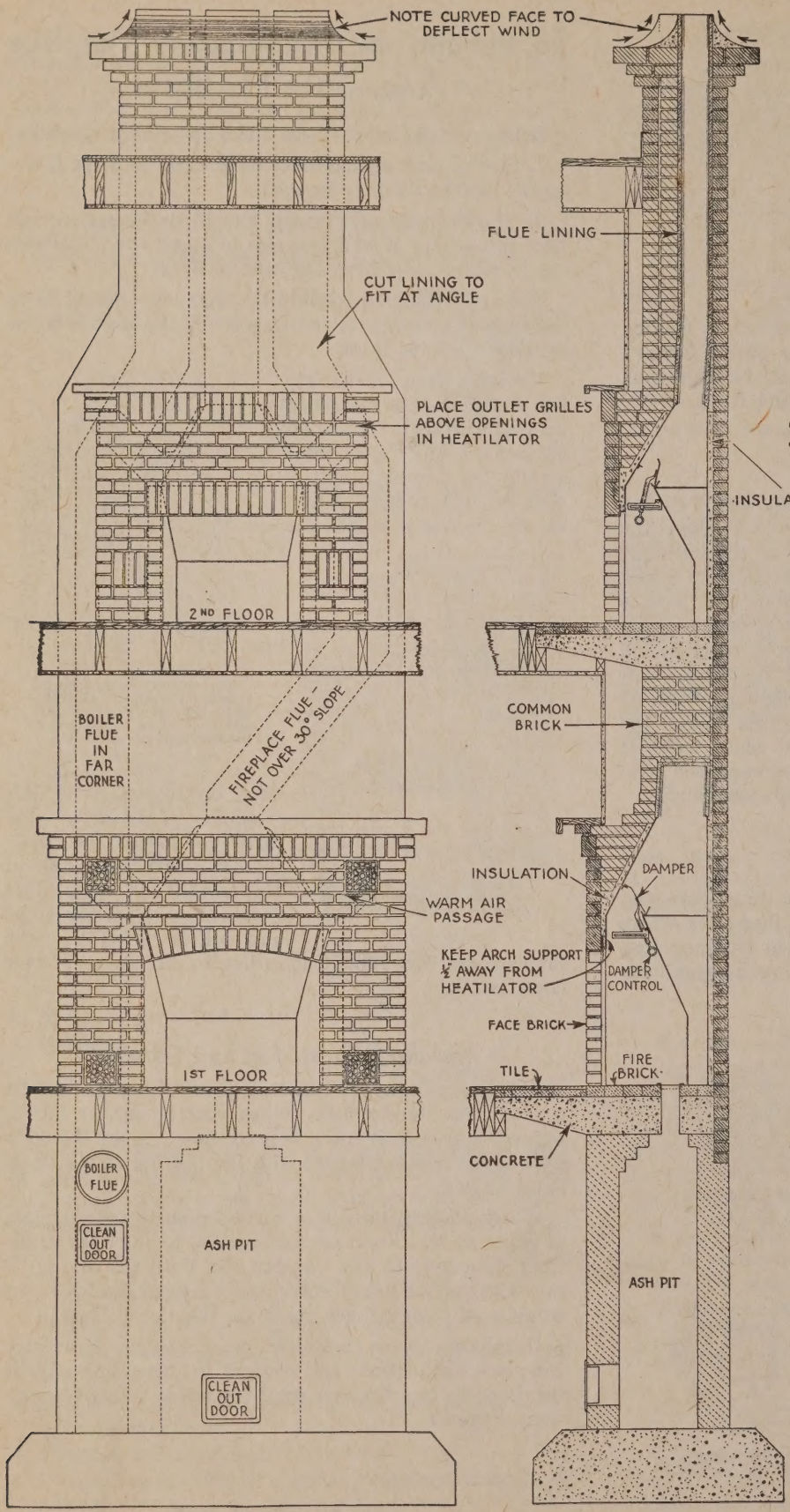
Special Information and Service

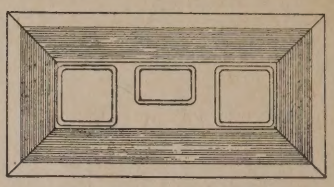
A fireplace basket or andirons should be used for best results from the fireplace. When coal or similar fuel is burned, a basket is specially necessary. Avoid the solid back styles which interfere with the heating of the Heatilator firebox.

When starting a fire it is a good plan to light a piece of paper in the throat of the fireplace to start the draft. Cold chimneys act as a damper and, until the cold air is raised out of the flue, the fireplace may smoke slightly as would a stove or furnace under the same conditions.

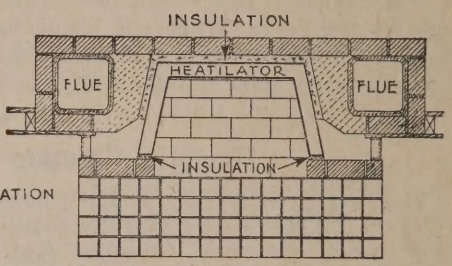
Installation plans and assistance on special Heatilator Fireplace installations not covered in this folder will be furnished by our Engineering Department without obligation. Write to

HEATILATOR INC.
SYRACUSE 5, N. Y.

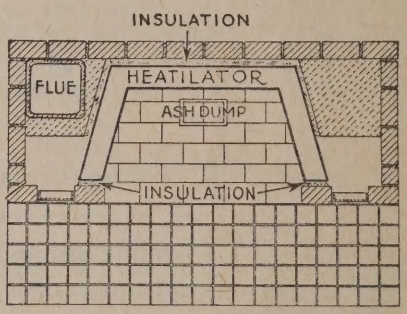




DETAIL OF CHIMNEY TOP



SECOND FLOOR PLAN



FIRST FLOOR PLAN

Chimney Flue Sizes

Heatilator Number	Square or Rect. Flue	Round Flue	Oval Flue
	For Chimneys Over 20' High		
124	8½" x 13"	10"	8½" x 13"
130	8½" x 13"	10"	8½" x 13"
133	8½" x 13"	10"	8½" x 13"
136	13" x 13"	12"	13" x 13"
142	13" x 13"	12"	13" x 13"
148	13" x 18"	15"	13" x 17"
160	13" x 18"	15"	17" x 17"
Heatilator Number	For Chimneys Under 20' High		
124	8½" x 13"	10"	8½" x 13"
130	8½" x 13"	10"	8½" x 13"
133	13" x 13"	12"	13" x 13"
136	13" x 13"	12"	13" x 17"
142	13" x 18"	15"	13"x 17"
148	13" x 18"	15"	17" x 17"
160	18" x 18"	18"	17" x 17"

Outside dimensions shown for square, rectangular and oval flues—inside diameters for round flues. Chimney height is measured from hearth.

© 1947, Heatilator Inc.

Printed in U. S. A.

AT 4258 H35 1947

AVERY LIBRARY COLUMBIA UNIVERSITY